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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/576,188

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Yukiko Ohira

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23117 7590 12/07/2010  
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EXAMINER

FORTUNA, JOSE A

ART UNIT

PAPER NUMBER

1741

MAIL DATE

DELIVERY MODE

12/07/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/576,188	<b>Applicant(s)</b> OHIRA ET AL.	
	<b>Examiner</b> José A. Fortuna	<b>Art Unit</b> 1741	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 November 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 4-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 4-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada et al., JP 09-031891, (JP Machine translation used), in view of Nisogi et al., WO 02/0100 (equivalent

Art Unit: 1741

EP 0300512 A1 used as the translation) or Makihara et al., JP 2003-171893, (JP Machine translation used), or Okago et al., JP 2000-345493, (JP Machine translation used) .

Okada et al. and Takebayashi et al. teach a cast coated paper and process of making, in which a paper substrate is formed, by the wet process, and then a coated with a coating layer comprising an inorganic pigment, e.g., Kaolin, and a plastic pigment, see abstract and ¶s-[0012]-[0016] of the detailed description section of Okada et al. and abstract and ¶s-[0018]-[0021] of Takebayashi et al. They teach loading ranges of the Kaolin pigment in the same range as claimed, see abstract and ¶-[0014]. Okada et al. also teach that the cast coating is done by subjecting a wet coating layer into a pressure contact with the surface of a heated mirror surface drum to form a finished cast coating layer, see abstracts. Okada et al teach the rewetting cast coating as claimed, see examples. Okada et al. fail to teach the size distribution of the pigments as claimed. However, the secondary references, Nisogi et al., Makihara et al., and Okago et al., teach that using a size distribution of the Kaolin pigments as claimed have superior print gloss and excellent surface feel, while improving the coatability of the base paper, see ¶s-[0025]-[0027] of Nisogi et al. (The EP'512); improves the disposition of blister, see the Detailed Description of Makihara et al.; printing glossiness and reduced weight, see abstract of Okago et al. The secondary references teach also the use of bond inhibiting agent to increase the bulk of the base paper and, superior pliability as well as greater resistance to tearing, see for example ¶-[0014] of Nisogi et al. Therefore, using the Kaolin size distribution and the use of bond inhibiting agent in the paper substrate as suggested by the secondary references in the paper s of Okada et al. or Takebayashi et al. would have

Art Unit: 1741

been obvious to one of ordinary skill in the art in order to obtain the advantages discussed above, i.e., better printability, bulkier paper, superior Gloss, etc.

5. Claims 4-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nisogi et al., WO 03/056101 A1, (Equivalent US Patent Application Publication No. 2005/0016701 A1, has been used as the translation) with or without Okada et al. (cited above).

Nisogi et al. teach a coated printing paper and method of making it, in which a coating mixture of an organic plastic particles and inorganic pigments, e.g. Kaolin, is added to the surface of paper substrate, said paper substrate having a bond inhibiting agent, see abstract and ¶s-[0024], [0043]-[0046]. In ¶-[0044] Nisogi et al. teach that it is preferred to use Kaolin with size distribution and amounts as claimed and in ¶-[0043] they teach that pigment can include plastic pigments that can be used alone or in combination of two or more as necessary. In ¶-[0049] Nisogi et al. teach that the coating can be applied using any known coater, which includes cast coating, since this technique is very well known in the art. Note that the rewetting cast coating is well known in the art, as evidenced by applicants and also by Okada et al, see above , and therefore, using rewetting cast process to coat the paper taught by Nisogi et al. would have been obvious to one of ordinary skill in the art, since he/she would have reasonable expectation of success in such process were used to coat a web. Note that it has been held that “[W]here two equivalents are interchangeable for their desired function, substitution would have been obvious and thus, express suggestion of desirability of the substitution of one for the other is unnecessary.” In re Fout 675 F. 2d 297, 213 USPQ 532 (CCPA 1982); In re Siebentritt, 372 F.2d 566, 152 USPQ 618 (CCPA 1967).

Art Unit: 1741

***Response to Arguments***

6. Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

7. Applicant's arguments filed on November 16, 2010 have been fully considered but they are not persuasive.

Applicants argue that Okada et al cannot be combined with the secondary references, since the secondary references do not teach rewetting cast coating. This is unconvincing, because the secondary references were used for the particular teachings of the pigment size distribution and the use of inhibiting agent(s) to increase bulk, not for the specific type of coating process. Note that it has been held that "The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference.... Rather, the test is what the combined teachings of those references would have suggested to those of ordinary skill in the art." In re Keller, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). See also In re Sneed, 710 F.2d 1544, 1550, 218 USPQ 385, 389 (Fed. Cir. 1983) ("[I]t is not necessary that the inventions of the references be physically combinable to render obvious the invention under review."); and In re Nievelt, 482 F.2d 965, 179 USPQ 224, 226 (CCPA 1973) ("Combining the teachings of references does not involve an ability to combine their specific structures.").

Applicants also argue that Okada teaches away of using a solid plastic pigment, since they teach the use of at least 45% of a Hollow plastic pigment. The arguments are not persuasive for the following reasons:

Art Unit: 1741

- The claims, except claim 11, do not require that the use of a solid plastic pigment, and;
- The pigment is hollow does not precludes it from being solid.

Applicants also argue that Nisogi et al. do not teach the cast coating as it is now claimed.

The arguments are moot in view of the new rejection, see above.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure in the art of Cast Coating.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to José A. Fortuna whose telephone number is 571-272-1188. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew J. Daniels can be reached on 571-272-2450. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1741

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/José A Fortuna/  
Primary Examiner  
Art Unit 1741

JAF